

PHENIX WEEKLY PLANNING



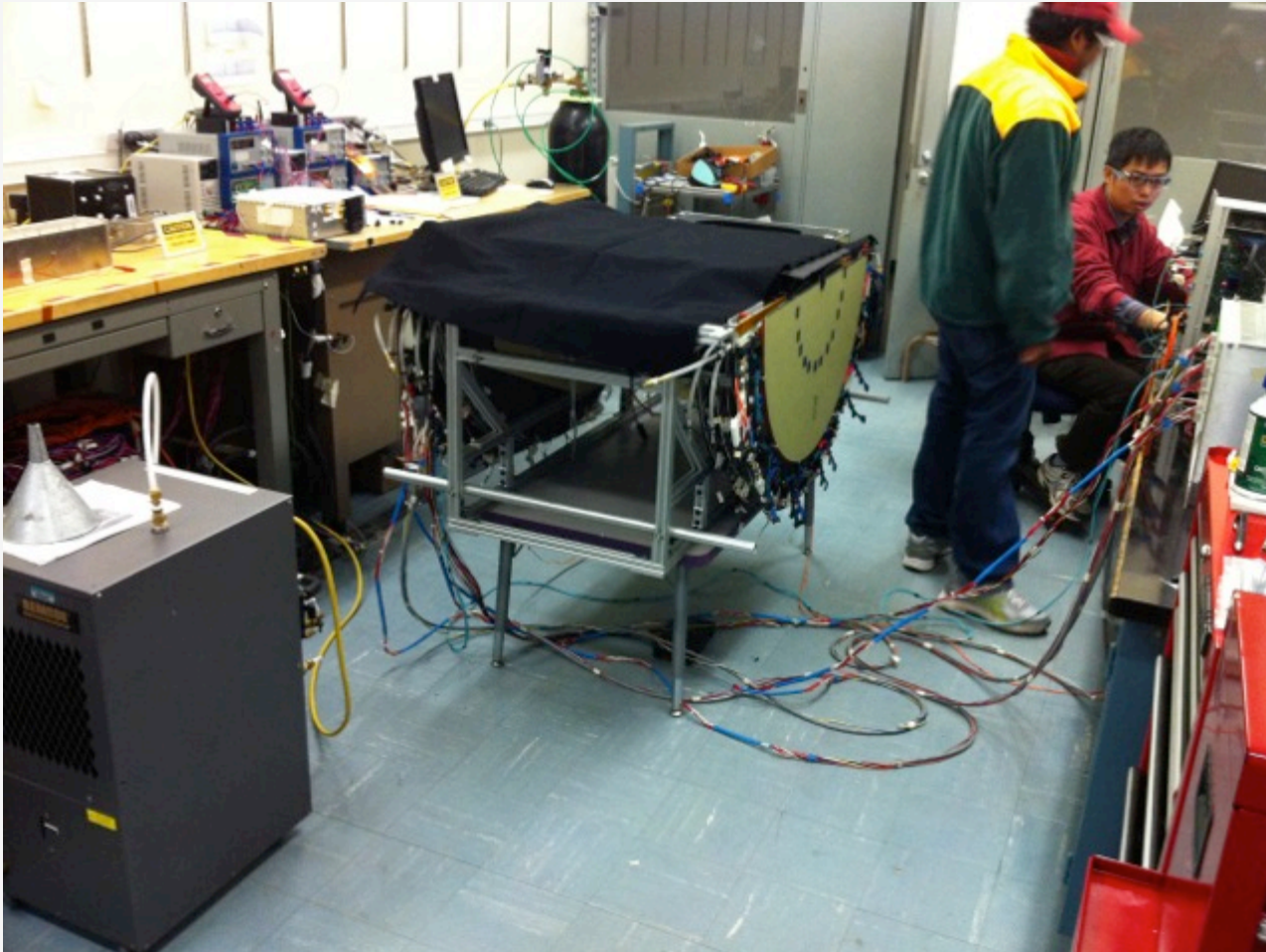
Nov. 7, 2013
Don Lynch

This Week

- Finish Assembly of FVTX/VTX West
- Begin Survey of FVTX/VTX West, East
- Complete assembly and testing of VTX East Strip-pixel ladders
- Assemble and Test FVTX/VTX East
- Continue upgrading VTX/FVTX supply/return lines to stainless
- Continue MPC-Ex installation prep & design/fabrication of assembly fixtures & components
- Continue sPHENIX support
 - HCal prototype assembly
 - EMCal prototype assembly
- Future IR evolution modeling

Next Week

- Complete surveying FVTX/VTX East & West
- Complete upgrading VTX/FVTX supply/return lines to stainless
- Begin Installing FVTX/VX
- Begin Installing MPC-Ex South (partial)
- Continue sPHENIX support
 - HCal prototype assembly
 - EMCal prototype assembly
 - Tilting/rotating SupportStructure assembly & test
- Future IR evolution modeling



FVTX/VTX West
Assembled ready for
survey

VTX East assembly in
progress

Assembly test and
survey in Chemistry to
be completed by 11/14
then ready for
installation in IR

VTX & FVTX Remaining Tasks

Receive remaining strippixel stave components	Done
Assemble & test strippixel staves	Done
Receive remaining pixel ladders	Done
Test pixel ladders	Done
Integrate staves & electronics & test	in progress
Assemble East & West VTX & test	in progress
Transport FVTX to Chemistry building.	By 11/8
Integrate FVTX Integrated into East & West VTX.	By 11/13
Survey VTX/FVTX assembly	By 11/14
Transport VTX&FVTX assembly to PHENIX and install on rails.	11/15
Re-install coolant and N ₂ lines, LV, signal and HV cables and fibers	by 11/25
Re-survey full detector in IR	by 11/27
Re-commission VTX & FVTX	by 1/1/14

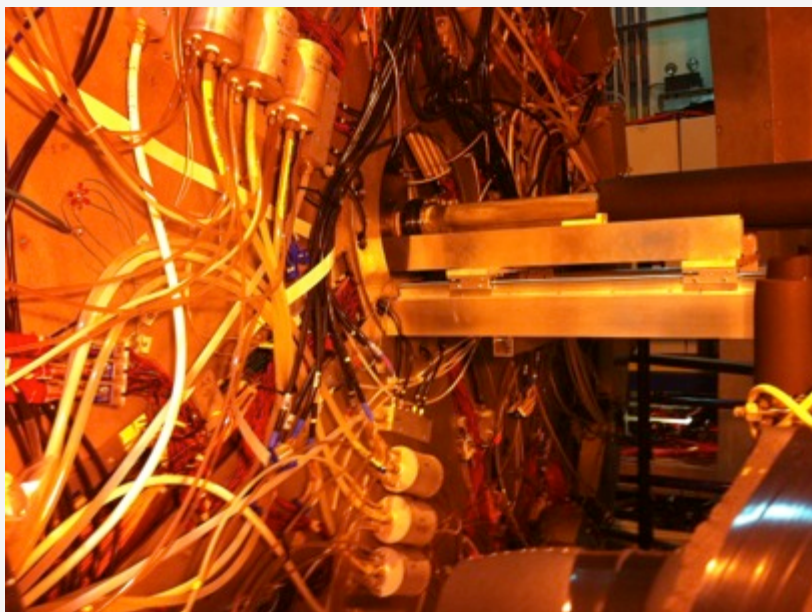
DC East & West Repairs Summary of Tasks

PHENIX
STATION

- East Carriage move to AH - Done
- Work Permit - Done
- Design & Construct tent (similar to tent constructed for DC West last year) to prevent foreign material from entering DC East cavity while window is removed. - Done
- CAD to provide 2 vertical manlifts to allow DC experts to remove and replace window - Done
- Get supplies and materials from Stony Brook for window replacement - Done
- Troubleshooting and repairs on DC West - Done
- Supply Gas, DAQ and Electric to EC East - Done
- Isolate and repair leak on DC East - Done
- Remove and replace window - Done
- Isolate and repair leak under electronics card - Done
- Leak test - Done
- Operational tests - Done
- Remove tent and manlift - Done
- DC West broken wire removal - 12/15 - 12/30

11/7/2013

MPC-Ex Initial (Partial) Installation



Preliminary assembly with single carrier board in half detector with LV distribution board tomorrow. Remaining 3 carrier boards by next week, then installable partial detector to be assembled next week.

Vacuum bellows anti-squirm in MPC S Cavity installed.

Installation tool assembled; Tool placement for installation is in progress

Test Fit of partial assembly in progress

1st tungsten/carrier board lamination done

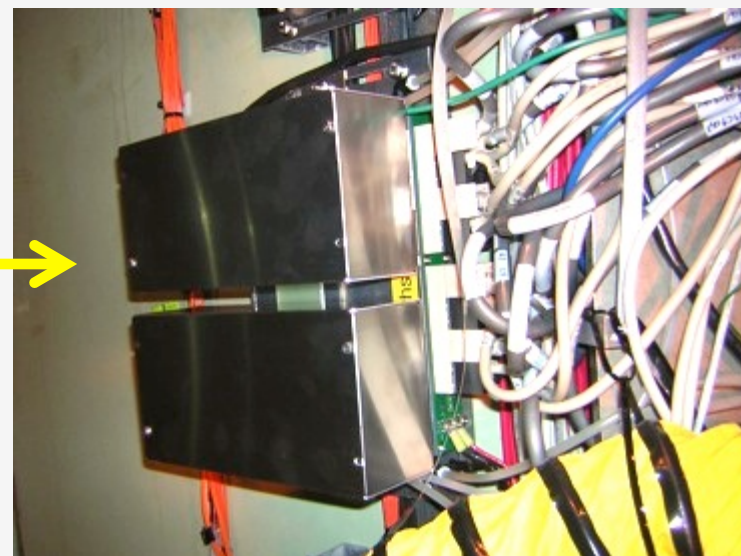
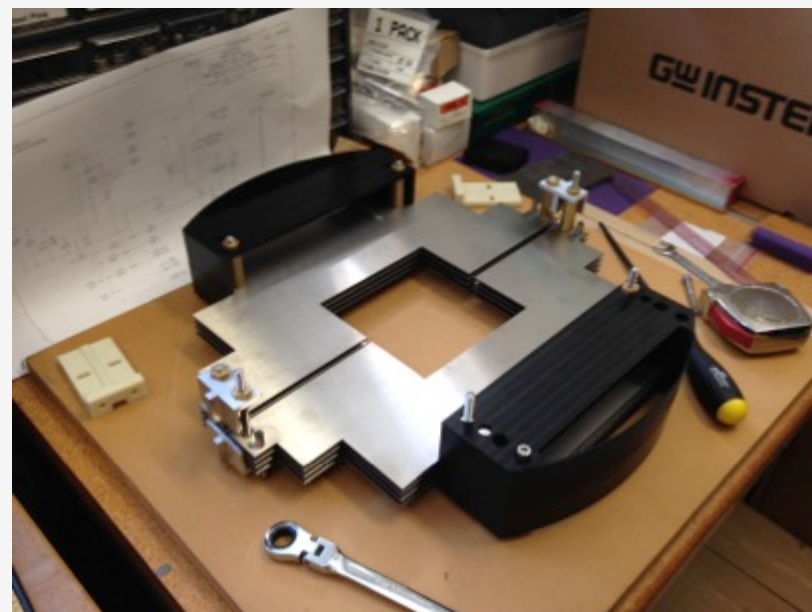


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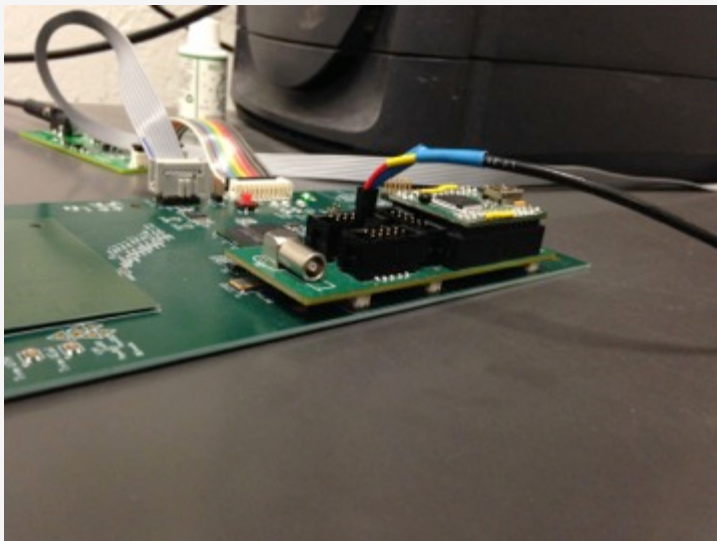
PHENIX - SDAOAT - NO-3



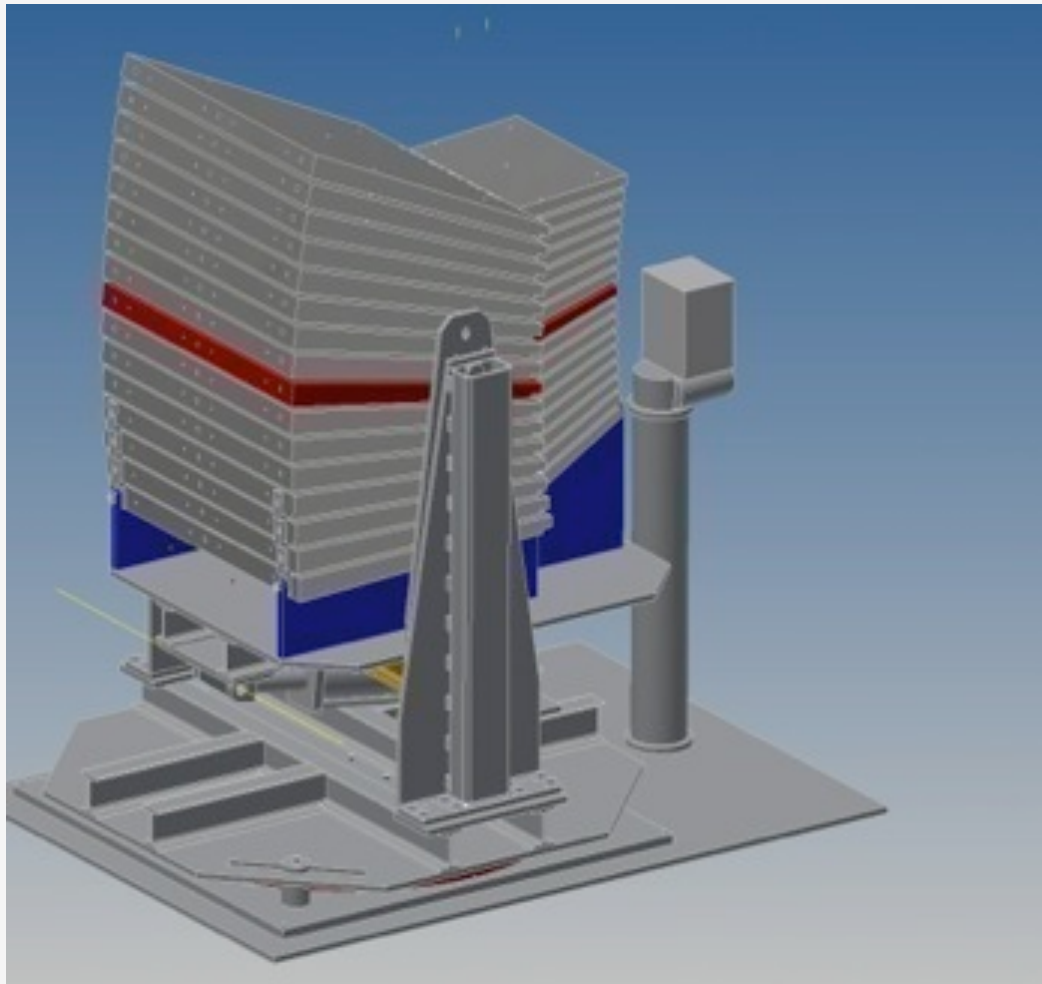
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PHENIX - SDAOAT - NO-3



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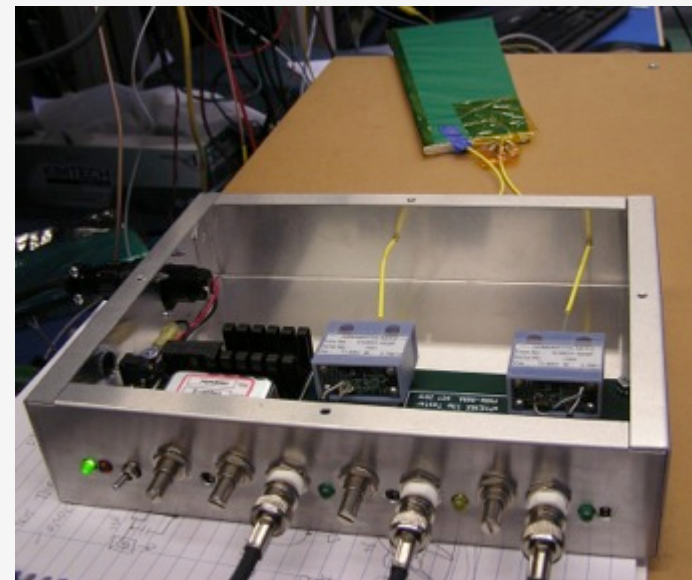




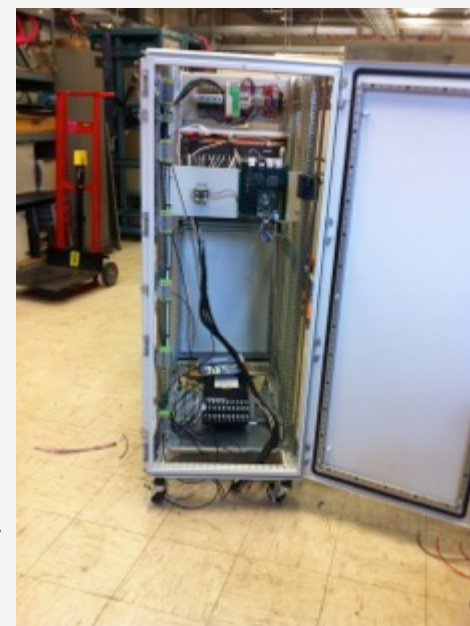
Hcal assembly in progress

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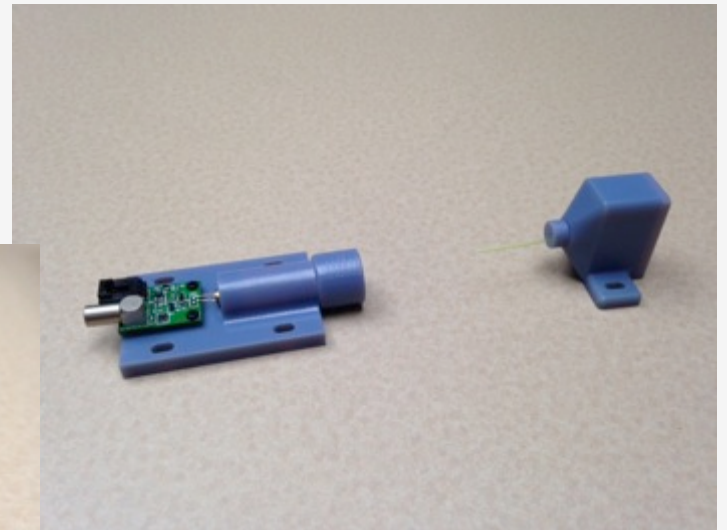
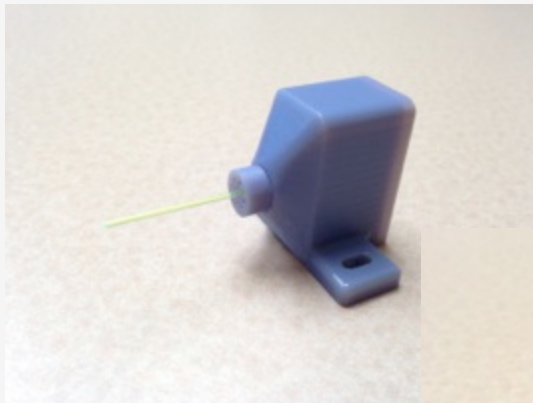
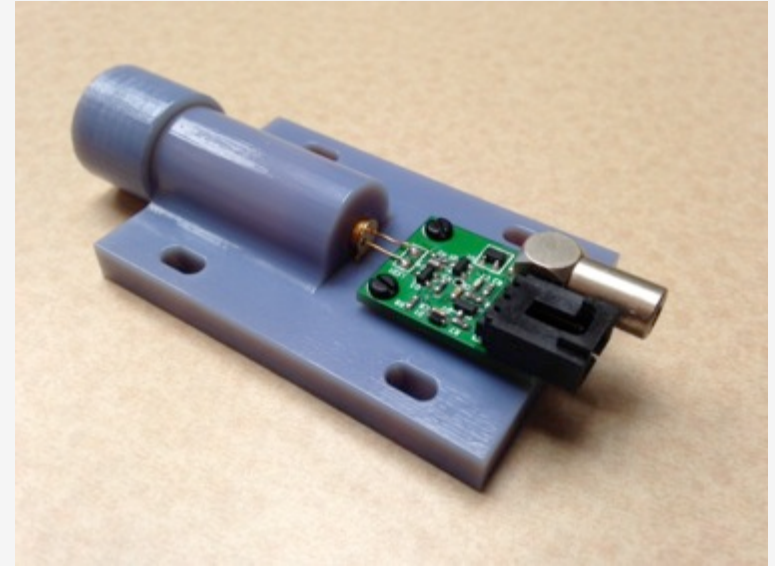
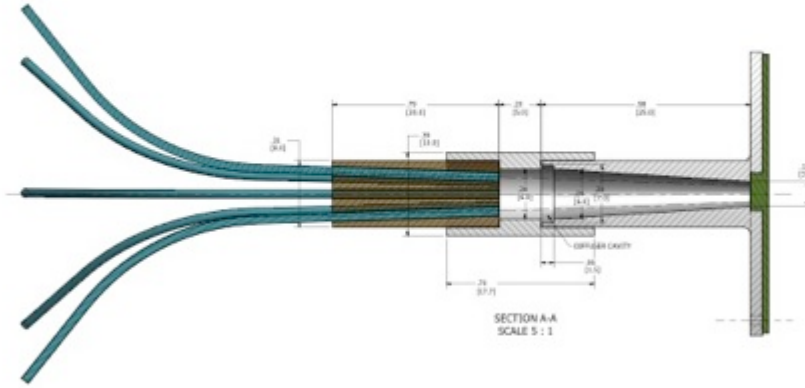
sPHENIX prototype electronics rack



Steve Boose's Tile tester

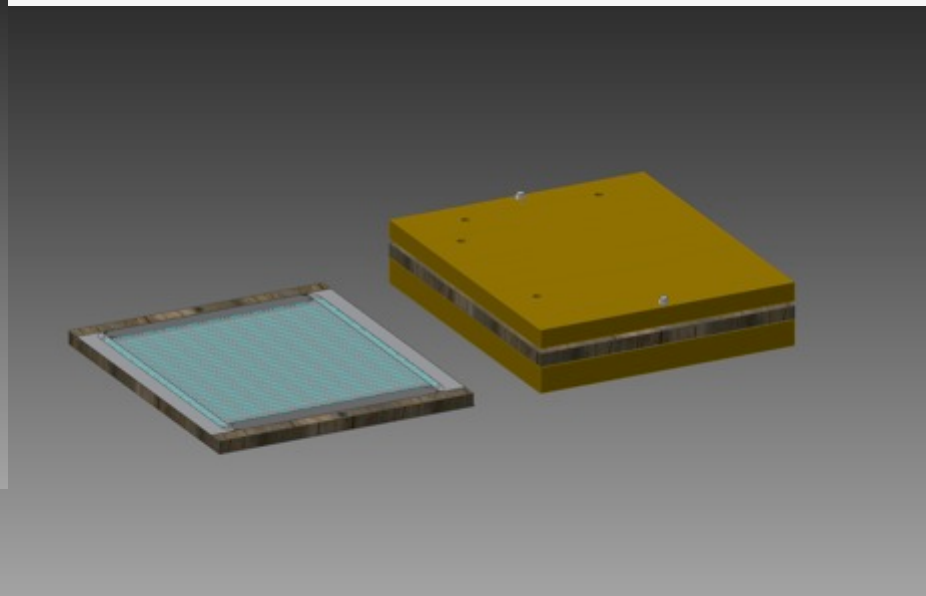
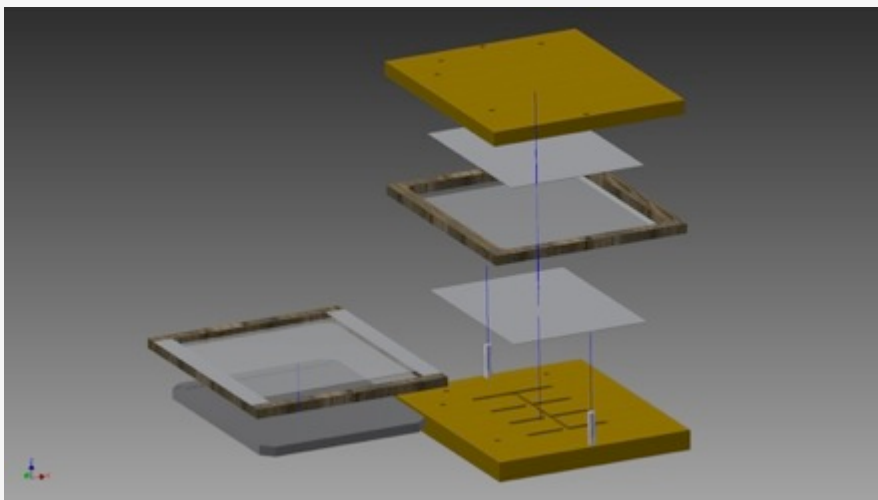


Light Collection for HCal



EMCal Prototype

PHENIX - PROTOTYPING



Prototype "Egg Carton" light collection



11/7/2013

sPHENIX Prototype Assembly and Test Tasks

TECHNICAL SUPPORT NOTES

Design Hcal and EMCal Prototypes and support components and shipping crates - **in progress**

Procure materials and detail parts - **in progress**

Receive and inspect parts

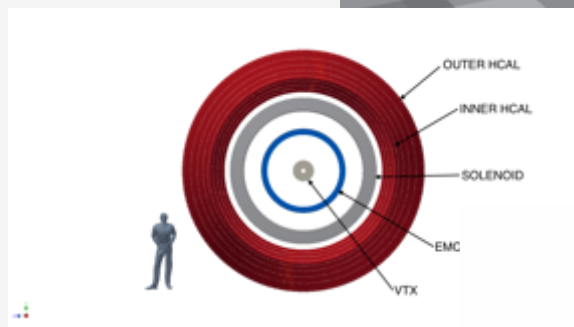
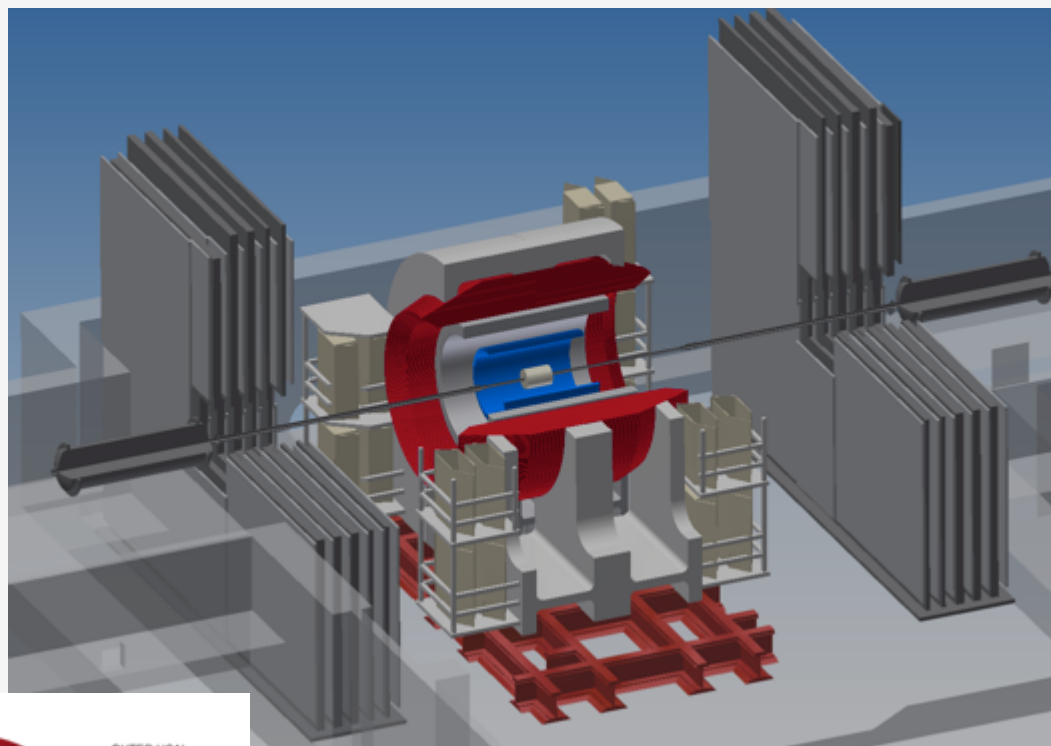
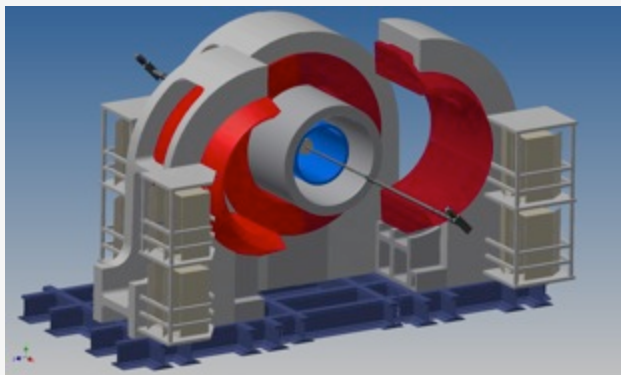
Assemble prototypes

Test assemblies for mechanical fit and function

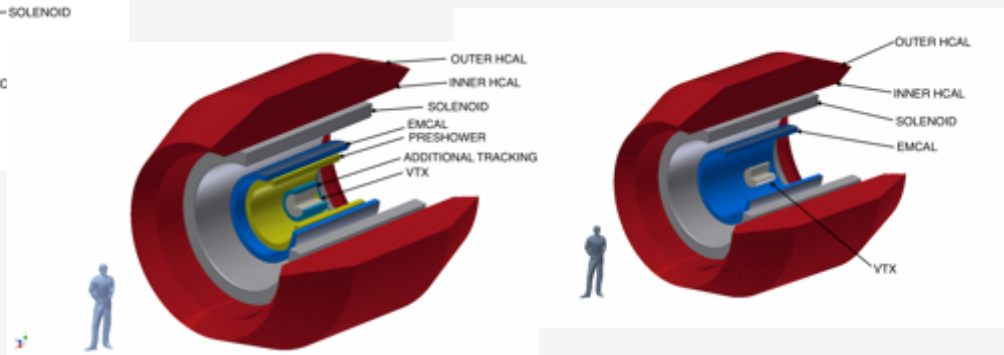
Package and ship prototypes to FERMI Lab for performance tests

Test and Evaluate at Fermi Lab

TECHNICAL SUPPORT

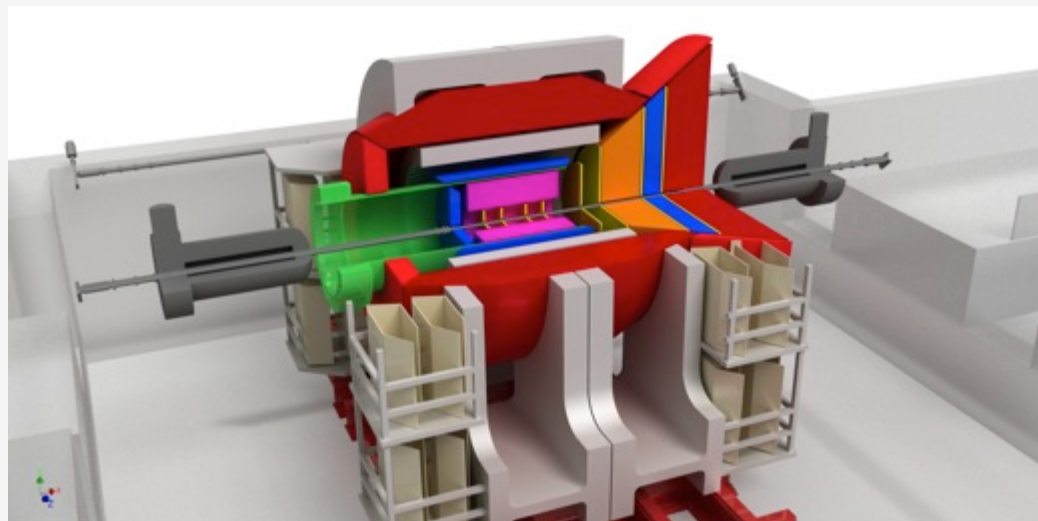


sPHENIX Modeling
support for
updated MIE

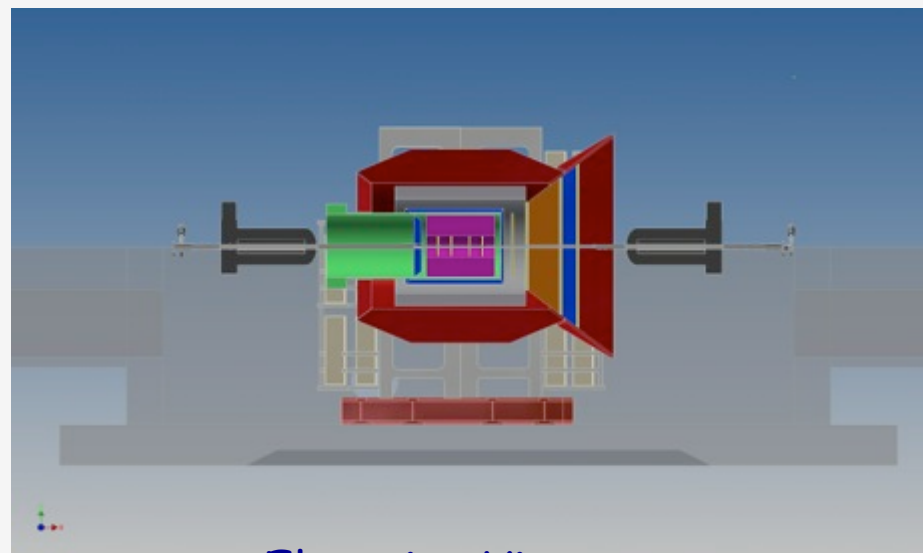
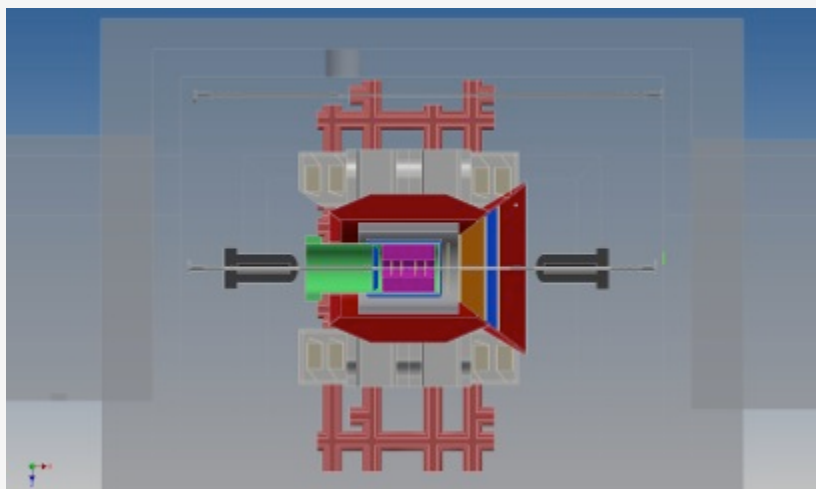


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ePHENIX



Plan View



Elevation View

11/7/2013

Window Washer Winch Upgrade Summary of Tasks

Receive and Inspect winch and components - Done

Design and Fabricate Winch & Sheave Base - Done

Install and test Winch, integrate with window washer
hardware, controls and power - **Done**

Final Inspection and approval of window washer upgrade

(Note: remote safety pin insertion and retraction was installed and has been in
operation since the start of run 13.)

Alcohol Chiller Work For Shutdown 2013



Merlin Chiller

➤ Chiller supplied about ½ the flow as in the past.

- Pressure on chiller says ~70-80psi
- Install gauge on supply line and measure actual output pressure.
- Replace chiller with spare if needed.
- Send old chiller out for maintenance or replace.

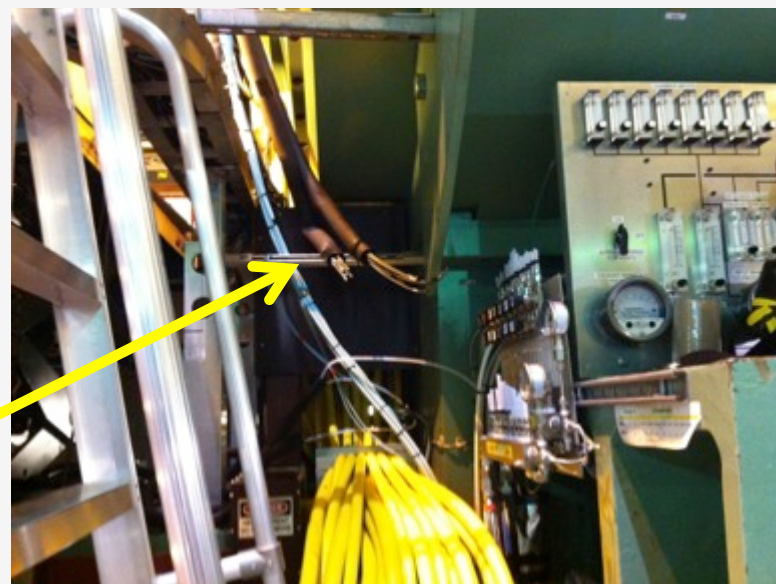
New Chiller failed to be returned for warranty replacement.

Re-Insulate Glycol lines



❖ Remove old polyethylene insulation and wrap and replace with foam rubber insulation.

- Temp of fluid is affected too much by temp change in the gas house.
- Lines are condensing and dripping because of gaps in insulation.



Replace VTX supply tubing with stainless steel
as much as possible - **in progress**

2013 Shutdown Schedule

TESTING - SHUTDOWN

Prep for 2013 shutdown	Done
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	Done
VTX Strippixel 1 st article stave assembly	Done
VTX Strippixel 1 st article qualification/performance tests	Done
VTX Strippixel sensor reclamation	Done
Run 12 Ends	Done
Shutdown Standard Tasks	Done
• Open wall, disassemble wall, Remove MuID Collars	
• Move EC to AH, etc.	
VTX/FVTX Post run tests	Done
Disassemble VTX/FVTX services	Done
July 4 th Holiday	Done
Remove VTX/FVTX and transport to Chemistry Lab	Done
Remove Lampshade MMS, East Vertical	Done
VTX strippixel stave production	Done
Pixel Ladder repairs	Done
VTX Strippixel ladder assembly & Test	7/15-11/5/2013
Assemble, Test and Install MPC-Ex (Partial, location TBD)	7/22-11/15/2013

MuTR Troubleshooting, maintenance and repairs	Done
Summer Sunday (8/4) Prep and teardown	Done
Summer Sunday (RHIC)	Done
DC West troubleshooting & Repairs	Done
DC East Window Upgrade and Related Repairs	Done
sPHENIX HCal Prototype Assembly/test	8/19-12/31/2013
Re-assemble VTX/FVTX halves	by 11/8/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	11/1-11/14/2013
Install & Survey VTX/FVTX in 1008 IR	11/14-11/25/2013
VTX Commissioning	11/25/2013-1/31/2014
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
Pre-run commissioning and prep for run 14	11/25/2013-1/31/2014
Veterans Day, Lab Holiday	11/11/2013
Thanksgiving Holidays	11/28-29/2013
Prep for EC roll in	11/1-12/2/2013
Roll in EC	12/2-12/6/2013
Prep IR for run	12/1-12/15/2013
DC West wire repairs	12/15-12/30/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Pink/Blue/White sheets	12/14-1/31/2014
Start run 14	2/3/2014

Safety and Security

From John Maraviglia:

1. ODH-1 Training Practical Wed. 11/13, Wed. 12/4, Fri 12/6

Attend one of these from 11:15-Noon if you need to access tunnel during run 14

2. Training sessions for the newly installed Vacuum Oxygen Deficiency Hazard (VODH) safety system, please attend any session:

All sessions are 11:15 AM - 12 noon, Bldg 911 Snyder Seminar Room

November 12

November 19

November 21

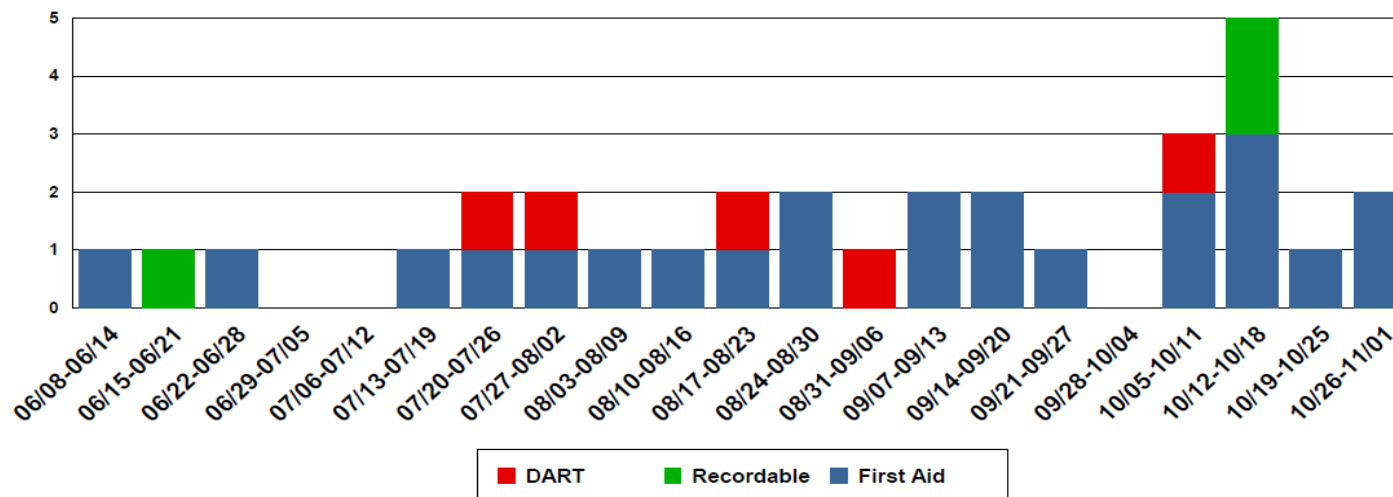
December 5

(A reminder will be sent as the first date approaches.)

Other Safety Info:

- Vertical Ladder Protocol

Injuries Per Week
As of 11/1/2013



Injury Status:

FY14 YTD: DART – 1, TRC – 3, First Aid – 8

FY13: DART – 14, TRC – 37, First Aid – 53

FY12: DART – 19, TRC – 38, First Aid – 69

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLInjuries.aspx>

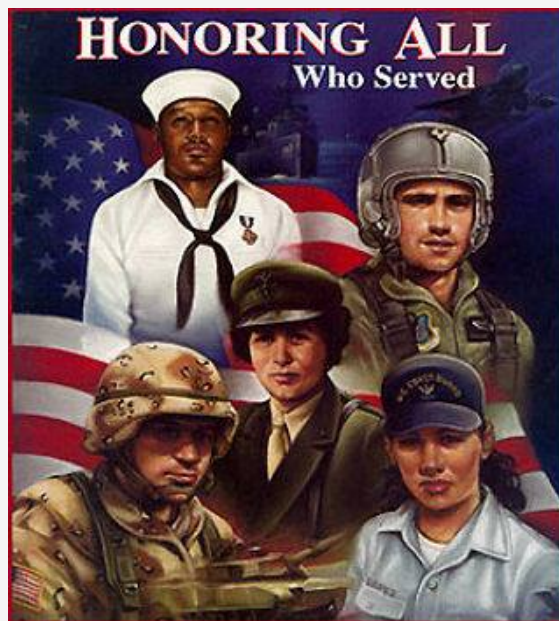
Recent Injuries

10/29/13	First Aid	Two employees noted electrical sparking while one plugged a laptop video projector into a power strip. The employee holding the plug felt an electrical shock. The employee and ESH Coordinator reported to the OMC where she was evaluated and released for work. There was no injury.
10/29/13	Info only	A guest cut his hand while opening a can with a scissor. At the OMC, first aid was given. This injury is not included in the BNL rates. This is for information purposes only.
10/28/13	First Aid	An employee tripped over boxes and fell after being startled by the automatic actuation of a dewar overpressure relief valve. He injured his arm and shoulder as a result of the fall. At the OMC, first aid was given.

Recent Events

	None
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Where To Find PHENIX Engineering Info



Lab Holiday next Monday 11/11/13: Veterans Day

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

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